Fig. 1

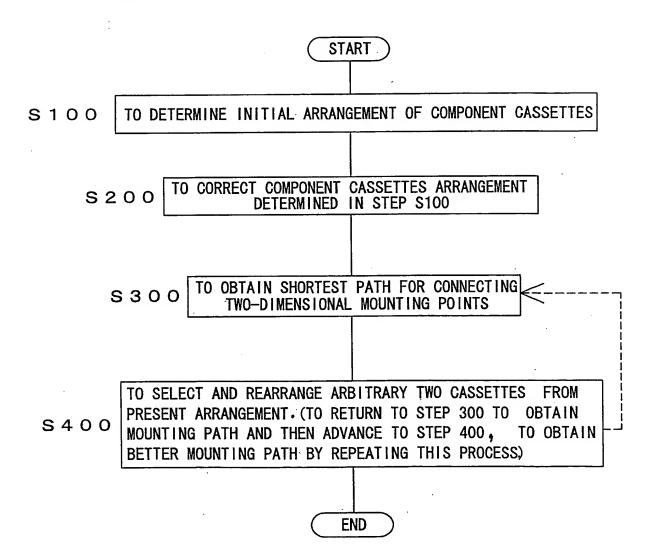


Fig. 2

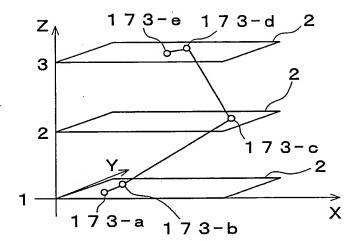


Fig. 3

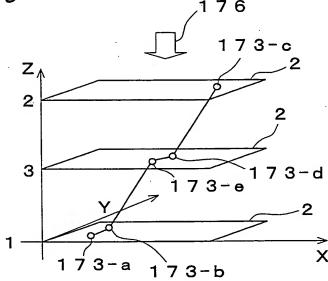


Fig. 4

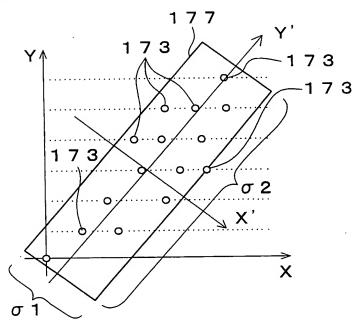


Fig. 6

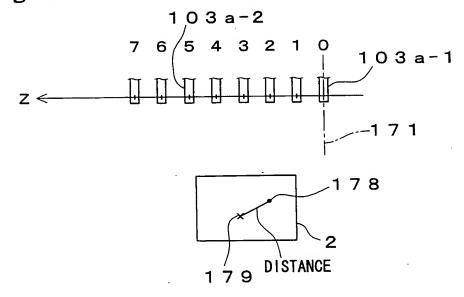


Fig. 5

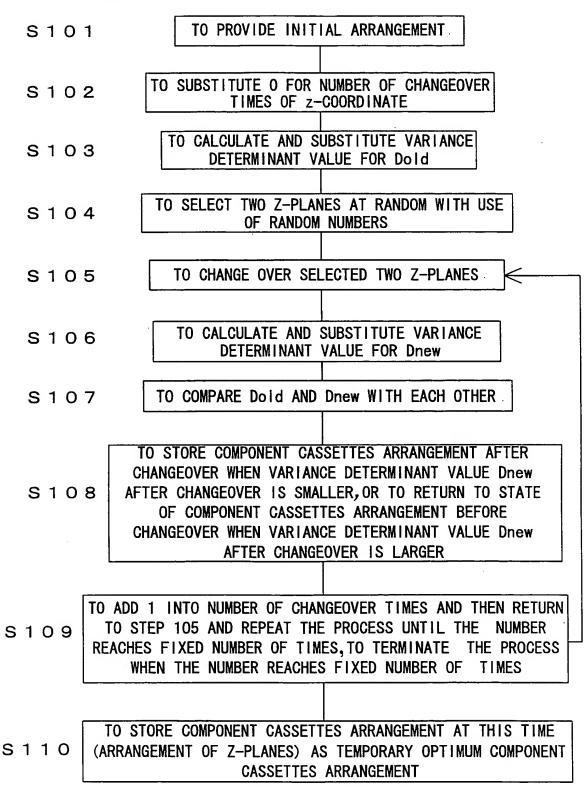


Fig.	7 START
S 2 0 1	TO CHECK FROM Z=O WHETHER z-PLANE INCLUDES ONE OR TWO MOUNTING POINTS.TO ADVANCE THE PROCESS WHEN THE PLANE INCLUDES MOUNTING POINTS.TO CHANGE Z TO Z=+1 UNLESS THE PLANE INCLUDES MOUNTING POINTS AND TO CHECK SIMILARLY WHETHER Z-PLANE INCLUDES ONE OR TWO MOUNTING POINTS
S 2 0 2	TO SET z OBTAINED IN STEP 202 AS REFERENCE z1
S 2 0 3	TO SELECT MOUNTING POINT INCLUDED IN z1 AS REFERENCE MOUNTING POSITION
S 2 0 4	TO CHECK FROM Z=Zn/2 WHETHER z-PLANE INCLUDES ONE OR TWO MOUNTING POINTS.TO FOLLOW THE PROCESS WHEN THE PLANE INCLUDES MOUNTING POINTS, TO SUBTRACT 1 FROM Z UNLESS THE PLANE INCLUDES MOUNTING POINTS AND TO CHECK SIMILARLY WHETHER z-PLANE INCLUDES ONE OR TWO MOUNTING POINTS
S 2 0 5	TO SET Z OBTAINED IN STEP 204 AS OBJECT z2
S 2 0 6	TO SELECT MOUNTING POINT INCLUDED IN z2 AS OBJECT MOUNTING POSITION
S 2 0 7	TO CALCULATE X, Y-DISTANCE BETWEEN z1 AND z2 MOUNTING POINTS. TO ADD X, Y-DISTANCE BETWEEN TWO MOUNTING POINTS ON THE SAME z-PLANE WHEN THE PLANE INCLUDES THE TWO MOUNTING POINTS
S 2 0 8	TO COMPARE DISTANCE WITH A PREVIOUS VALUE AND STORE THE DISTANCE AS L WHEN IT IS SMALLER, TO SUBTRACT 1 FROM Z AND TO RETURN TO STEP 204, TO PROCEED TO NEXT STEP WHEN z2 REACHES z1
S 2 0 9	TO MOVE Z2 WHICH PROVIDES SMALLEST L TO POSITION OF z1+1, TO MOVE ORIGINAL Zs AFTER Z1+1 BACKWARDS EACH BY ONE, TO RETURN TO STEP 201
S 2 1 0	TO TERMINATE THE PROCESS WHEN z1 REACHES Zn/2 END

Fig. 8

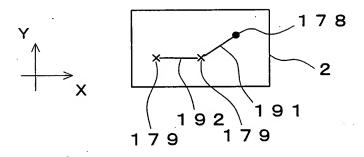


Fig. 15

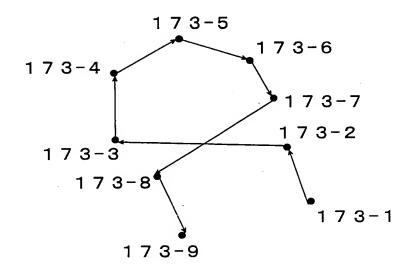


Fig. 9

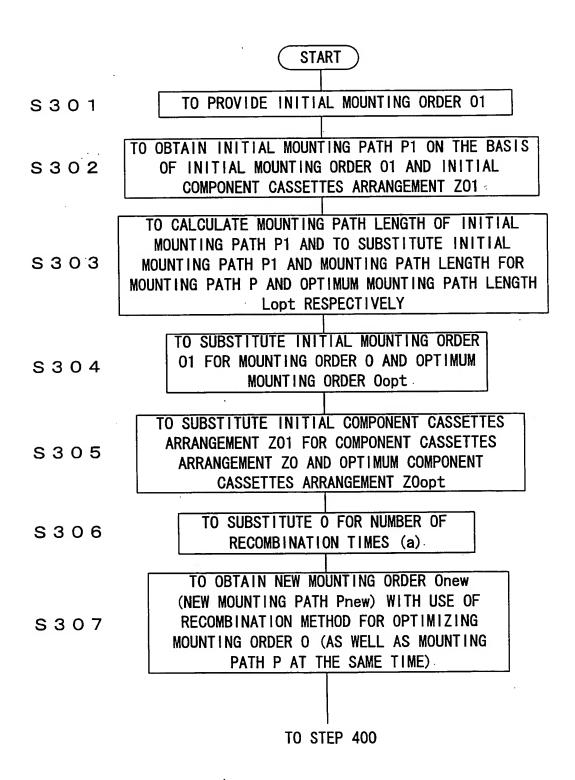


Fig. 10

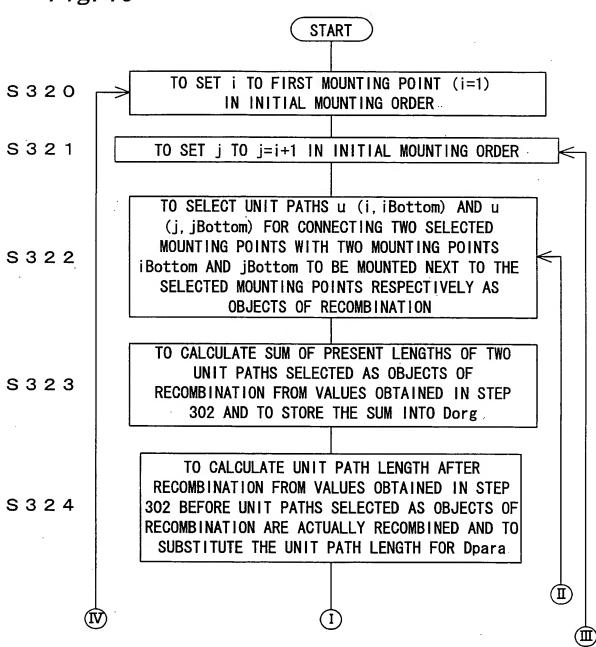


Fig. 11

TO COMPARE Dorg AND S 3 2 5 Dpara WITH EACH OTHER TO ACTUALLY RECOMBINE UNIT PATHS ONLY WHEN Doara IS SMALLER TO FORM MOUNTING PATH BY NEW UNIT PATHS u (i, j) AND u S326 (iBottom, jBottom) AND TO REFLECT THE OPTIMIZED MOUNTING PATH TO MOUNTING ORDER. TO ADD I TO J AND THEN RETURN TO STEP 322 WHEN I IS SMALLER THAN (TOTAL NUMBER OF MOUNTING S 3 2 7 POINTS-1) OR TO MOVE TO NEXT STEP WHEN J IS LARGER THAN (TOTAL NUMBER OF MOUNTING POINTS-1). TO ADD 1 TO I AND THEN RETURN TO STEP 321 WHEN I IS SMALLER THAN (TOTAL NUMBER OF MOUNTING S 3 2 8 POINTS-2) OR TO MOVE TO NEXT STEP WHEN I IS LARGER THAN (TOTAL NUMBER OF MOUNTING POINTS-2) TO CALCULATE TOTAL MOUNTING PATH LENGTH L S 3 2 9 TO COMPARE Lopt AND L WITH EACH OTHER TO TERMINATE THE PROCESS WHEN BOTH AGREE OR TO RETURN TO STEP 320 IN OTHER CASES WITH 1 S 3 3 0 ADDED TO (a) TO END WHEN (a) EXCEEDS FIXED NUMBER OF TIMES

Fig. 12

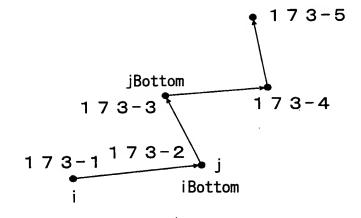


Fig. 13

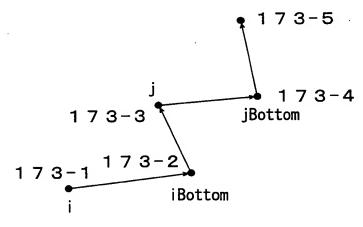
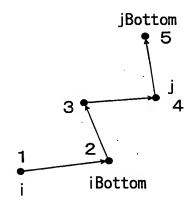


Fig. 14





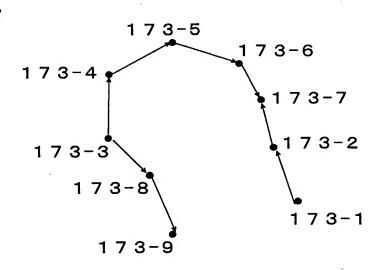


Fig. 17

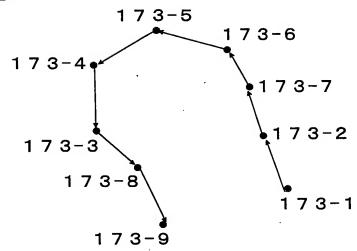
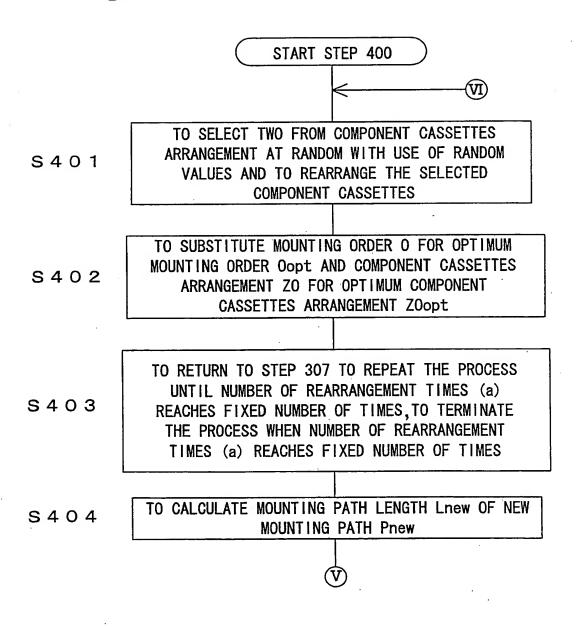
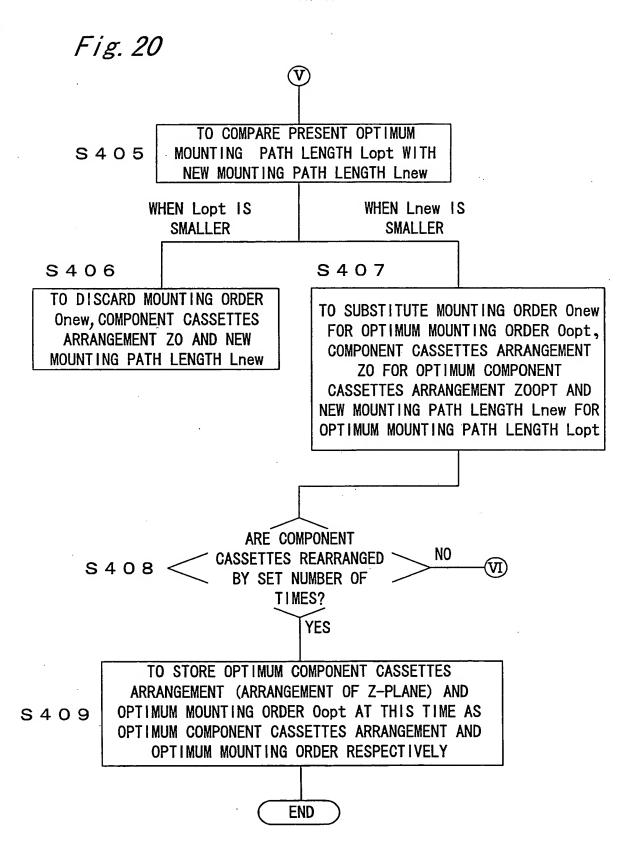


Fig. 18

MOUNTING ORDER	MOUNTING POINT
N o 1	173-1
No2	173-2
N o 3	173-7
N o 4	173-6
N o 5	173-5
N o 6	173-4
N o 7	173-3
N o 8	173-8
No9	173-9

Fig. 19





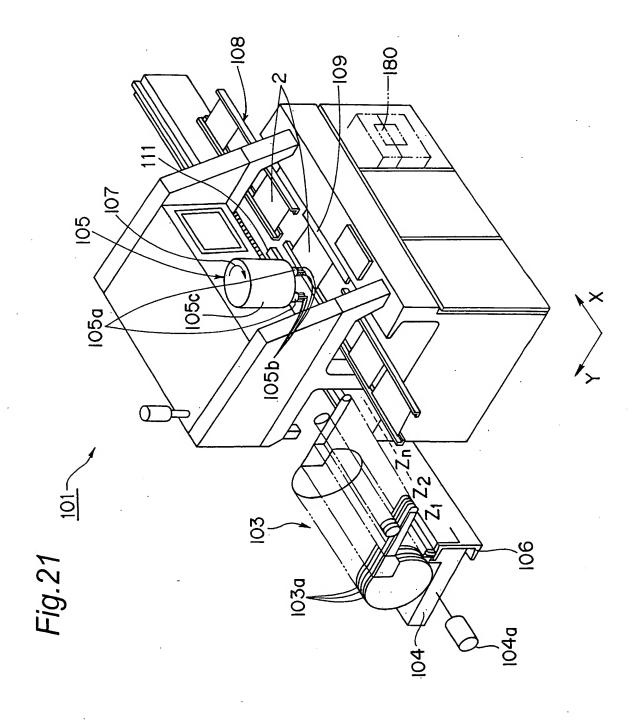


Fig. 22

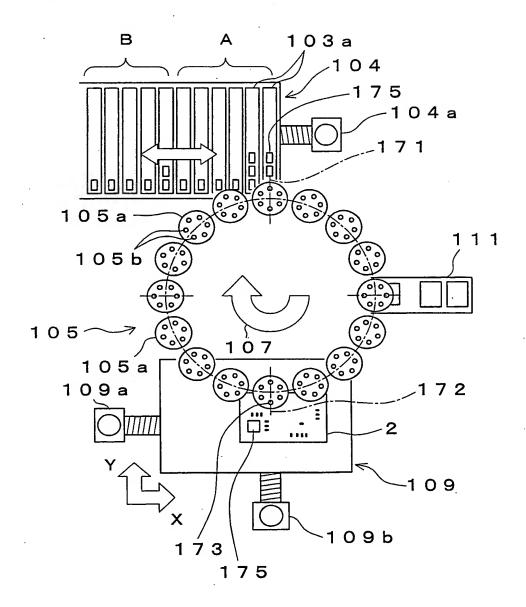


Fig. 23

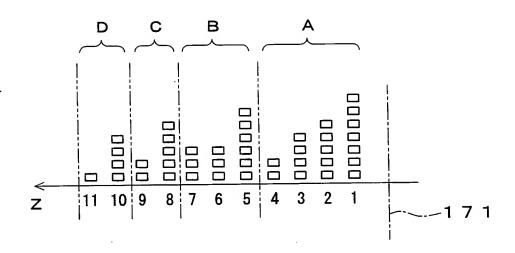
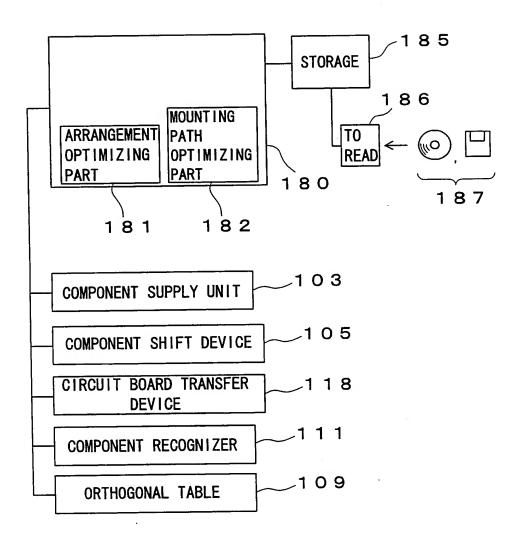


Fig. 25

	XY MOVEMENT DISTANCE	THREE-DIMENSIONAL MOVEMENT DISTANCE	TOTAL NUMBER OF Z SHIFT
PRESENT EMBODIMENT	3644	5619	133
Α	4002	5816	115
В	5193	7372	165

Fig. 24



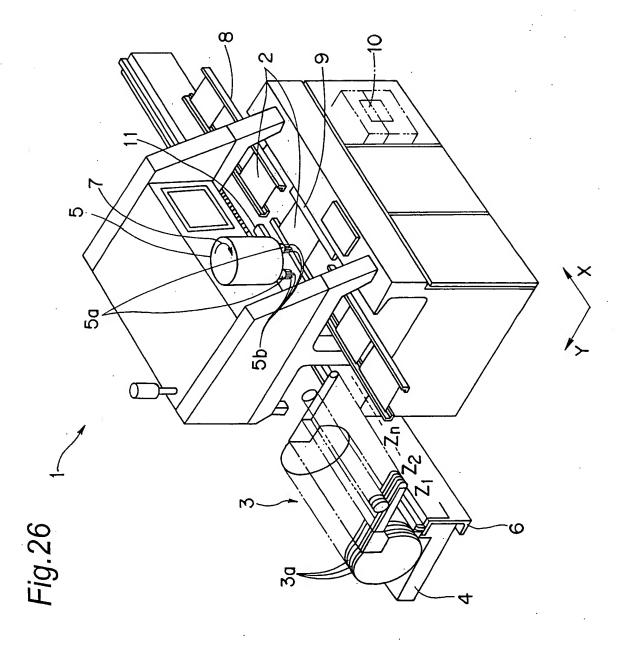


Fig. 27

